

(19) World Intellectual Property  
Organization  
International Bureau



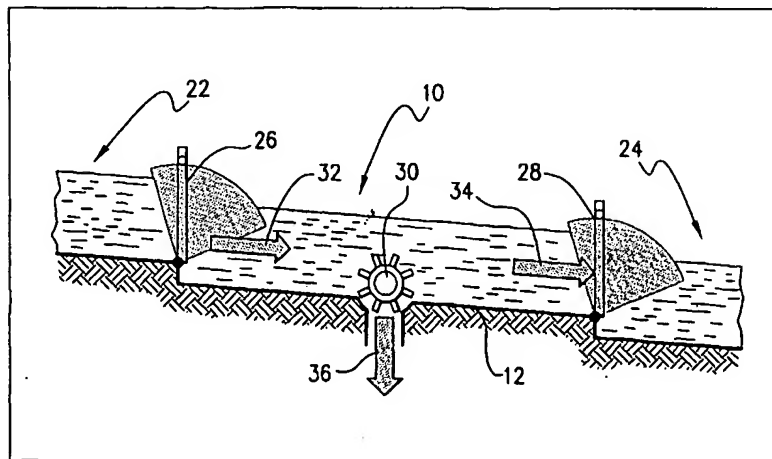
(43) International Publication Date  
29 September 2005 (29.09.2005)

PCT

(10) International Publication Number  
**WO 2005/090928 A1**

- (51) International Patent Classification<sup>7</sup>: **G01F 1/00**,  
G01M 3/00, 3/26, E02B 13/00, B65G 5/00
- (21) International Application Number:  
PCT/AU2005/000416
- (22) International Filing Date: 22 March 2005 (22.03.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
2004901525 22 March 2004 (22.03.2004) AU
- (71) Applicant (for all designated States except US): **RUBI-  
CON RESEARCH PTY LTD** [AU/AU]; Suite 4, 109  
Union Road, Surrey Hills, Victoria 3127 (AU).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **AUGHTON, David**  
[AU/AU]; 425-427 Riversdale Road, Hawthorn East, Vic-  
toria 3123 (AU).
- (74) Agents: **MACAULEY, Colin, Douglas et al.**; Callinan  
Lawrie, 711 High Street, Kew, Victoria 3101 (AU).
- (81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,  
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,  
ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: **LOSS DETECTION SYSTEM FOR OPEN CHANNEL NETWORKS**



(57) Abstract: The invention discloses a loss detection system to determine and monitor containment losses for open channel networks (10). The system includes at least first and second flow regulators (26, 28) to allow flow of liquid into and out of at least one pool (10) respectively. First and second flow sensors co-operate with respective flow regulators (26, 28) and a computational means communicates with flow regulators (26, 28) and the flow sensors to control operation of flow regulators (26, 28). The computational means determines the containment losses by calculating the measured flow into at least one pool (10) through at least first flow regulator (26) and subtracting the measured flow out of at least one pool (10) through at least second regulator (28).

WO 2005/090928 A1